

It was true that the lowest estimate, aside from the purportedly aberrant one by the Army and Navy, showed no significant gap—fifty Soviet ICBMs to our forty—but the majority opinion in the intelligence community was estimating a missile gap in favor of the Soviets as late as the June 7 NIE, a few days after the Vienna summit.

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In the last week of September 1961, Alain Enthoven, now the assistant secretary of defense for systems analysis, and Harry Rowen in ISA informed me of a new national intelligence estimate. It was astonishing. It essentially confirmed what the Army and Navy estimators had been saying for two years in their footnote dissents to the NIEs: that the Soviets had “only a few” ICBMs. The number observed was actually *four*.

“Observed”—that was the big secret. Neither Alain nor Harry told me, initially, just what type of information the new intelligence report reflected, but within days, discussions in the Pentagon had revealed it to me inadvertently. This was not just an “estimate,” based on inferences about production capabilities, or Soviet “requirements,” or ambiguous electronic intelligence. Four missiles had actually been seen, and photographed, at one site at Plesetsk by our most highly secret intelligence system at the time, the Corona satellite program. (The cover name for the program was Discoverer. It had replaced the U-2 spy plane program, which had been equally secret until the Soviets shot down a CIA U-2 over Russia and captured its pilot Gary Powers in 1960.) No other missile launchers had been seen elsewhere in the Soviet Union—except for a couple of prototype launch sites at the missile-test complex at Tyuratam—after what was finally nearly complete coverage of possible missile sites.

The fact that this was “hard” intelligence based on actual photos was what is now called sensitive compartmented information (SCI), higher than Top Secret. Access to it required a Keyhole (K) clearance, higher than Top Secret, which I didn’t have at the time. The existence of clearances higher than Top Secret was in those years itself a well-kept secret, along with the nature of the information each of them covered and the actual information

itself. It was extremely unusual for anyone holding such a clearance to give any hint of these secrets to someone who didn't have the special clearance.

The penalty for a security breach of that nature was to be dropped immediately, within minutes of the discovery of the indiscretion, from the computer listings of those with access to the special clearances. That meant exclusion from the list of those who counted in national security discussions within the government—those who had access to this information and could talk freely among themselves. That sanction helped keep those secrets very, very well. Leaks to the press were nonexistent, either about the clearances, the intelligence means, or the contents of the information. Breaches of discipline, either deliberate or inadvertent, even to close colleagues who hadn't been specially cleared, simply didn't occur, with few exceptions.

I happened to benefit from several such exceptional breaches. Talking with Colonel Ernie Cragg, of the plans division of the Air Staff, one late night in the Pentagon cafeteria, I asked him something about the basis for the new missile estimates. He started to answer, then broke off, looked at me, and asked, "Are you cleared for T and K?"

I said no, and Cragg clammed up, evidently realizing he'd already said more than he should have.

Cragg's question was breach number one. As I was briefed later, when I did get such clearances, if he were in doubt as to whether he was dealing with someone who was entitled to this information, he should never have mentioned to that person the code letters revealing the existence of these clearances. If he really wanted to discuss these matters, he should have excused himself, gone to a Pentagon phone to call a special number, identified himself by a code, and asked the officer at the other end, "Is Daniel Ellsberg cleared for T or K?" If the answer, based on a computer search in the control office he was calling, was no, he would come back and change the subject.

If the answer was yes, he would come back and tell me that I had checked out and invite me to go to a phone to check his clearance out using the same process. For a uniformed colonel in Air Force Plans that I knew personally, that might not have seemed necessary. But in theory, he could have been bluffing, having heard the initials "T" and "K" or perhaps even

having found out their nature, tricking me into a discussion to which he was not entitled.

That possibility was the basic need for this rigmarole, and why only the first letters of the code words “Talent” (for U-2 photography) and “Keyhole” (for the reconnaissance satellite program and photos) were to be mentioned in a public place, where they might be overheard. Elaborate as it sounds, this two-phone-call routine was something I practiced many times in later years before talking with someone whose access was not known to me. Procedures like this—and the sanction of being summarily cut off from access, involvement, and advancement by violating them—kept a vast amount of information relevant to government decision-making (“higher than Top Secret,” SCI) secret from the public, Congress, and most of the government, along with foreigners and enemies, for long periods of time; they were proof against leaks for decades and generations, even when information was known to hundreds or thousands of individuals cleared for it.

The cliché that “everything leaks; it all comes out in the *New York Times* eventually” is emphatically not true, above all for sensitive compartmented information. It’s a cover story, designed both to hide and sustain the effectiveness of the overall secrecy system. (Edward Snowden was the first ever to expose a large amount of SCI, including massively unconstitutional and criminal dragnet surveillance of American citizens and others in the world without probable cause for suspicion. Many thousands of NSA employees had known for a decade of that mass surveillance and its criminality. Not one other had disclosed it. Snowden is currently in exile, probably for life.)

Ironically, the second breach was by an unlikely person, a normally very tight-lipped colleague who had long been known at RAND to have “intelligence clearances,” whatever that meant. After Cragg’s slip, I asked my friend, who was in D.C. consulting, the meaning of “T” and “K,” and he actually told me.

In retrospect, it’s amazing, even perplexing, that he did so, which was not only against rules that were almost never violated but was highly out of character for him. Moreover, he said that I should make an effort to get

those clearances, along with SI clearance (for special intelligence, a cover term for signals intelligence, comprising communications intercepts and other electronic signals). The three together gave one what was called “all-source access,” the *output* of communications and reconnaissance intelligence.

Those who had (only) SI, T, and K in addition to Top Secret clearance were told, and almost all believed, that with their “all-source access” they had all the existing clearances. That was another cover story. There were in fact many clearances higher than these.

The existence of special access programs (SAPs) known as “operational” clearances about special programs—including, say, the actual operations and decision-making process concerning the U-2 or its successors or the family of reconnaissance satellites or covert operations—was unknown to those who had “only” all-source intelligence. I got a dozen of these clearances when I was special assistant to the assistant secretary in 1964–65. For example, Ideal (I) was clearance for information about the operations of the U-2 program and the decision-making in connection with its uses and priorities. The existence of this clearance, and what it covered, would be unknown to the much larger number of people who had only Talent clearance to view the U-2 photography.

The final critical clue I got about how much to trust the new estimate of Soviet missile capabilities was that Harry Rowen (who now, like Alain Enthoven, had all-source clearances plus many more in his position in the Pentagon, as I later learned) described to me a conversation he’d had in Carl Kaysen’s White House office with Carl, Alain, and some CIA officials. They had been passing around, Harry said, actual photographs from the Corona satellite of the four Soviet ICBMs and the nonexistence of such missiles at other suspected sites. One of them had said, Harry told me, laughing, “These pictures are worth a billion dollars.” And someone else had answered, “That’s about what they cost.”

Harry’s telling me that there were now photographs of all the suspected sites, and the one real one, was the third breach. It was the big secret that I wasn’t cleared to know. Along with Cragg’s question to me about T and K and my friends’s explanation of the clearances to me, that clicked. The

version of the new NIE I'd seen was only Top Secret. It didn't tell, or even hint, what the new evidence was that led to the new *assurance* of the astonishing pronouncement on the Soviet ICBM force, or the lack of one. The new NIE would not be available to my colleagues back in Santa Monica. But even if they'd read it, as I now had, they wouldn't have known enough of the evidence on which it was based to know whether to believe it. Now I did.

I've gone into all this to emphasize that the *credibility* of this new estimate—fantastic, inherently incredible to anyone who had been relying on Air Force estimates or even CIA estimates (anything but Army and Navy estimates)—depended on knowledge of a kind of information that most people in the national security field, inside and outside the government, had no inkling existed. From the internal leaks —“unauthorized disclosures”—to me within the bureaucracy, I did believe it, even though it totally contradicted the fundamental basis for my concerns and work for the past several years.

It wasn't just a matter of numbers, though that alone invalidated virtually all the classified analyses and studies I'd read and participated in for years. Since it seemed clear that the Soviets *could* have produced and deployed many, many more missiles in the three years since their first ICBM test, it put in question—it virtually demolished—the fundamental premise that the Soviets were pursuing a program of world conquest like Hitler's.

As the Air Force chief of intelligence had put it in his dissent to the low figures in the June estimate, that pursuit of world domination would have given them an enormous incentive to acquire at the earliest possible moment the capability to disarm their chief obstacle to this aim, the United States and its SAC. His assumption of Soviet aims was shared, as far as I knew, by all my RAND colleagues and with everyone I'd encountered in the Pentagon:

The Assistant Chief of Staff, Intelligence, USAF, believes that Soviet determination⁸⁵ to achieve world domination has fostered recognition of the fact that the ultimate elimination of the US, as the chief obstacle to the achievement of their objective,

cannot be accomplished without a clear preponderance of military capability.

If that was their intention, they really would have had to seek this capability before 1963. The 1959–62 period was their *only* opportunity to have such a disarming capability with missiles, either for blackmail purposes or an actual attack. After that, we were programmed to have increasing numbers of Atlas and Minuteman missiles in hard silos and Polaris sub-launched missiles. Even moderate confidence of disarming us so thoroughly as to escape catastrophic damage from our response would elude them indefinitely.

Four missiles in 1960–61 was strategically equivalent to zero, in terms of such an aim. They could have hit Washington and SAC headquarters, but that would neither have disarmed nor paralyzed SAC's ability to annihilate them in response. The Soviets could hit a city or two, striking first. Suicidally. They had no second-strike missile capability at all against the continental United States.

Their four operational missiles, at one fixed site aboveground, were thin-skinned and liquid-fueled, with highly volatile fuel that couldn't be stored and that would take hours to load. A single U.S. missile warhead, landing several miles away, would destroy all four with near certainty. In 1961, at the high point of the Berlin crisis, in terms of actual survivable missile capability against the United States, the Soviets had no deterrent at all.

Khrushchev had been totally bluffing about his missile production rates. He had said he was turning them out "like sausages." That was realistic about his medium- and intermediate-range missiles within range of Europe and our overseas bases. But about ICBMs it was a flagrant lie. Moreover, it meant that he had consciously forsworn the crash effort needed to give him a credible first-strike capability in the only period when that might have been feasible.

Our assumptions about his aims and his sense of their requirements were now put entirely in question. Or they should have been.

My first reaction was that this startling turn of events must be made known to my colleagues at RAND as soon as possible, even though they

weren't officially authorized to see the new estimate. I flew back to Santa Monica and scheduled something that was unusual at RAND and a first for me: a Top Secret briefing. Nearly all the work at RAND except for key reports was at the Secret level. Though everyone in the building, including secretaries and maintenance staff, had to have Top Secret clearance, many employees never had occasion to use it.

At RAND they took the regulations about classified procedures very seriously. That was never done to the same degree in the offices I frequented in Washington, where most of the documents being carried around (even in one's briefcase going from the Pentagon to the State Department or the White House) were Top Secret. A Top Secret briefing at RAND was by invitation only, in a room with a RAND security guard at the door, checking off attendees by name on a list on a clipboard. That was something I never experienced in Washington.

"Briefings" were the major form of oral communication of studies and results to RAND colleagues or to Air Force audiences. They were almost always accompanied by charts on a chart stand or projected on slides, with graphs or bullet points. I'd given many briefings at RAND, but never with charts. It wasn't my style. I didn't use the blackboards that everyone had in their offices either; I can't think well on a vertical surface.

But this time, when everyone had been checked off and had settled down, I started by saying, "Herman [Kahn] says you should always have charts, so for once I've made some." They were on a chart stand. I'd lettered them myself, in red ink, with "Top Secret" at the top and bottom of each chart, as appropriate.

The first chart said, "Yes, Virginia, there is a missile gap."

I flipped to the next one: "It is currently running about 10 x 1."

Then the third: "In our favor."

There was no response at all from the audience of about fifty department heads, top management, and key researchers filling one of our larger conference rooms at one end of the building. With puzzled looks, they waited. I explained: The latest intelligence estimate was that the Soviets had exactly four ICBMs, soft, liquid-fueled missiles at one site, Plesetsk. Currently we had about forty operational Atlas and Titan ICBMs. This was

not including the intermediate-range ballistic missiles (IRBMs) we had within range of the Soviet Union, programmed to be about 120 within a year; or the Polaris sub-launched missiles that could be within range of the Soviets, almost 60 within a year. Hence, in terms just of ICBMs alone, the numbers were ten to one in our favor.

To sum up the heated discussion that followed: no one believed me. *No one*. “How would they know that?” was the theme. I couldn’t tell them. They had belatedly learned, only the previous year, about the U-2 program, and then only because Khrushchev had shot down Gary Powers. Before he was captured, only a handful of RAND employees had been cleared for Talent, and those few had meticulously followed the rules and given no hint of the program to any others at RAND.

Likewise, half a dozen or so RAND engineers had Keyhole clearance (as I learned later, when I had it). They had actually been critical to catalyzing most of the national overhead reconnaissance programs, first with planes, then balloons, the U-2, then satellites. Even if they hadn’t heard the latest results—which reflected the fact that the latest Corona passes had completed adequate coverage of all the suspected missile sites in the Soviet Union—they would have guessed immediately what the new estimate was based on. But if any of them were in my audience that day, they said nothing.

“Why would the CIA even think we should believe this?” I wasn’t supposed to know the answer to that question myself. I knew better than to jeopardize my chance of getting the clearances (as I would later do, toward the end of the year) by revealing the basis for the intelligence estimates. At least one in the audience, Amron Katz, was a reconnaissance expert who had known about the U-2 program and knew that it hadn’t discovered any ICBMs. But he had written a number of RAND memoranda conjecturing the possibilities for the Soviets to confound our reconnaissance by camouflage and concealment and distraction. He was not inclined to believe these findings without having studied the evidence in detail (even though, unknown to me and most of the rest of us except for top management, he had played an important role in the Corona program). The others of us had

all spent the last several years in anxiety of a possibly imminent Soviet threat of attack with bombers and a sizable number of missiles.

Few, probably, took seriously the Air Force estimates—all that were officially available to RAND—of hundreds to thousands of Soviet missiles in the near future. But to the extent they had heard of the more moderate CIA estimates, they regarded those as quite possibly too low. (The rumored Army and Navy “estimates” were beneath contempt.) We had all read of McNamara’s assertion that “there was no missile gap,” but hardly anyone at RAND paid any attention to that. And at most it implied that the Soviets might not have much more than the forty ICBMs we deployed in 1961. That, in combination with bomber and submarine-launched attacks, was quite enough, according to our analyses, to paralyze SAC.

Only a few who had seen the actual NIEs in Washington—no longer available at RAND—were even aware of the official dissenting footnotes by the Army and Navy that predicted “only a few” Soviet ICBMs in 1959, 1960, and 1961. If they had seen those, they would surely have reacted the same way my Air Force colleagues in the Pentagon did, believing that the Army and Navy were taking service bias to wild, almost treacherous extremes.

Two of the top Soviet experts at RAND were Arnold Horelick—later head of Soviet estimates at the CIA—and Myron Rush. (Rush’s claim to fame was that he had, almost alone, predicted the rise of Khrushchev to top power from studying the sequence of photographs of Kremlin officials gathered together for parades in Red Square or other formal occasions. It was an esoteric form of intelligence that gave rise to the term “Kremlinologist.”) In 1959 they had co-authored a Top Secret memorandum—uncommon, as I’ve said, at RAND—that warned with unusual urgency that the Soviets were probably conducting a crash program on ICBMs that would give them a significant first-strike capability as early as 1959 (i.e., right then). Their main basis for this was a close analysis of all Khrushchev’s statements on the subject. Their premise was that Bolsheviks did not bluff. On that assumption, the sequence of his allusions to rockets and sausage making told them that he had already arrived at the capability he had earlier predicted and now claimed.

They were wrong. Khrushchev had been bluffing. That was what the new estimate was saying. It was correct, as Horelick and Rush themselves acknowledged,⁸⁶ not much later, in a Top Secret report that was subsequently published. But many at RAND had believed their earlier memorandum, and my briefing was not enough to change that inclination.

More important, the estimate contradicted and essentially invalidated the key RAND studies on SAC vulnerability since 1956. Those studies had explicitly assumed a range of uncertainty about the size of the Soviet ICBM force that might play a crucial role in combination with bomber attacks. Ever since the term “missile gap” had come into widespread use after 1957, Albert Wohlstetter had deprecated that description of his key findings. He emphasized that those were premised on the possibility of clever Soviet bomber and sub-launched attacks in combination with missiles or, earlier, even without them. He preferred the term “deterrent gap.” But there was no deterrent gap either. Never had been, never would be.

To recognize that was to face the conclusion that RAND had, in all good faith, been working obsessively and with a sense of frantic urgency on a wrong set of problems, an irrelevant pursuit in respect to national security. That is not a recognition that most humans in an institution are quick to accept. It was to take months, if not years, for RAND to accept it, if it ever did in those terms. To some degree, it's my impression that it never recovered its former prestige or sense of mission, though both its building and its budget eventually became much larger. For some time most of my former colleagues continued their focus on the vulnerability of SAC, much the same as before, while questioning the reliability of the new estimate and its relevance to the years ahead.

Likewise, the Air Force, and especially SAC, was reluctant and slow to accept the new figures, despite the fact that they seemed to support what SAC and the JCS thought was a desirably tough U.S. position on the Berlin crisis. Both RAND and the Air Force expected the Soviets to build up their missile force. But that buildup, which did begin in 1963–64 (particularly after Khrushchev was replaced by Brezhnev), could never promise the Soviets the strategic advantages it might have offered in 1958–62.

Meanwhile the Berlin crisis itself still appeared very serious. The president's attempt to mobilize public opinion for a confrontation precisely by raising the serious possibility of nuclear war had backfired. His decision to encourage a major private fallout-shelter program was a misjudgment, mobilizing instead great controversy. The Russians continued to affirm their determination to sign a peace treaty and turn over access control of Berlin to the East Germans.

Flying back to Washington in late September following my abortive attempt to reorient thinking at RAND, and with the Berlin game and Abe Chayes's conclusion still fresh in my mind, I had one immediate concern: how could this new estimate be used to change our prospects in Berlin?

West Berlin remained deep within Soviet-controlled territory. The erection of the Berlin Wall had commenced, with Kennedy's acceptance (even relief). From Khrushchev's point of view, that was a solution to his immediate problem: the exodus of emigrants from East Germany through Berlin. It even turned out to be an adequate solution to his longer-term problem of stabilizing the regime in East Germany, and thus strengthening the Soviets' position in Eastern Europe. But that wasn't immediately seen or accepted by Khrushchev, and still less by the West. Khrushchev's ultimatum about giving control of access to the East Germans by the end of the year was still standing, as were his warnings against our trying to maintain our access by any military means.

Now suddenly both these threats appeared to have been based on an immense, years-long bluff about his strategic "parity" with the United States. Recently discovered documents from the Soviet archives show that he was at this time bluffing his own Warsaw Pact allies⁸⁷—as well as ours, in NATO—about this parity to reassure them about his management of the crisis and the risks of his apparently provocative diplomacy.

So why not let him know, privately, that his bluff had been discovered and that he should withdraw his ultimatum and his threats? I set out to draft proposals along those lines.